## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims

1. (currently amended) A photochromic material comprising a compound having a ring opening quantum yield of  $10^{-3}$  or lower, belonging to the diheteroarylethene class, represented by the following general formula [I]:

$$F_2$$
 $F_2$ 
 $F_2$ 
 $F_2$ 
 $F_2$ 
 $F_2$ 

wherein, in the general formula [I], A represents the following substituents [i] or [ii], and B represents the following substituents [iii] or [iv];

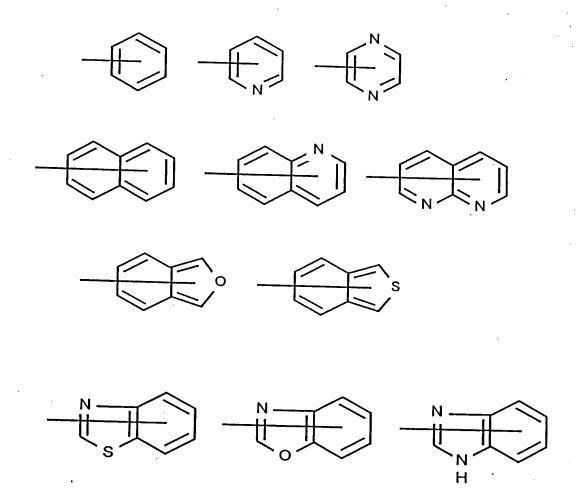
wherein, in the substituents [i] and [ii],  $R^1$  represents an alkoxy group,  $R^2$  represents -Q-Ar, Q representing a direct bond or an arbitrary divalent group and Ar representing an aromatic

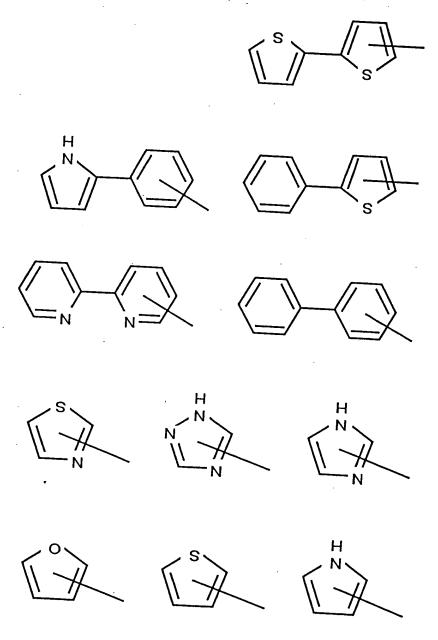
hydrocarbon ring or an aromatic heterocycle which are optionally substituted, R<sup>3</sup> represents a hydrogen atom, an alkyl group, an alkoxy group, a halogen atom, a fluoroalkyl group, a cyano group, or an aryl group which is optionally substituted, and Y represents -O- or -S-; and

in the substituents [iii] and [iv],  $R^4$  represents an alkoxy group,  $R^5$  represents -Q-Ar, Q representing a direct bond or an arbitrary divalent group and Ar representing an aromatic hydrocarbon ring or an aromatic heterocycle which are optionally substituted,  $R^6$  represents a hydrogen atom, an alkyl group, an alkoxy group, a halogen atom, a fluoroalkyl group, a cyano group, or an aryl group which is optionally substituted, and Z represents -O- or -S-.

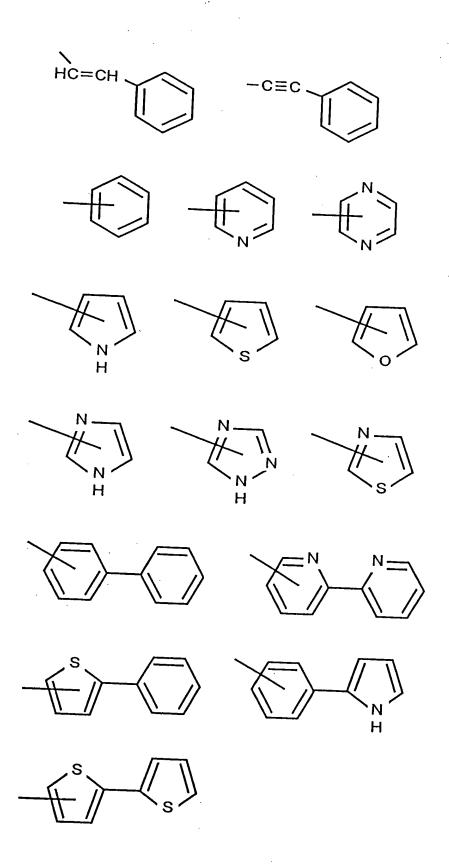
- 2. (currently amended) A photochromic material as claimed in claim 1, wherein the ring opening quantum yield is  $\frac{10^{-3}}{3.3 \times 10^{-4}}$  or lower.
- 3. (original) A photochromic material as claimed in claim 1, wherein  $R^1$  and  $R^4$  in the substituents [i]-[iv] of said general formula [I] each comprise independently an alkoxy group having 1-3 carbon atoms.
- 4. (original) A photochromic material as claimed in claim 3, wherein  $\mathbb{R}^1$  and  $\mathbb{R}^4$  each comprise a methoxy group.
- 5. (currently amended) A photochromic material described in claim 1 wherein Q in Q-Ar corresponding to  $R^2$  and  $R^5$  in the substituents [i]-[iv] of said general formula [I] each comprise independently a direct bond,  $-(-CH=CH-)n-\frac{(i.e.\ a-polyethylene\ group)}{(i.e.\ a-polyethylene\ group)}$  (wherein n=1-5), or  $-(-C=C-)n-\frac{(i.e.\ a-polyethylene\ group)}{(i.e.\ a-polyethylene\ group)}$  (wherein n=1-5), whereby Ar comprises a single 5- or 6-member ring, or two or three 5- or 6-member rings directly bonded or condensed, each of said rings being optionally substituted.

6. (original) A photochromic material as claimed in claim 5, wherein Ar in Q-Ar corresponding to  $R^2$  and  $R^5$  is selected independently from the group consisting of the following formulae:





7. (currently amended) A photochromic material as claimed in claim 6, wherein  $R^2$  and  $R^5$  are each selected independently from the group consisting of the following formulae:



- 8. (previously presented) A photochromic material described in claim 1, wherein  ${\bf R}^3$  and  ${\bf R}^6$  each comprise independently a linear alkyl group.
- 9. (currently amended) A photochromic material described in claim 1, wherein the photochromic material comprises a compound, belonging to the diheteroarylethene class, selected from the group consisting of the following formulae: